DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-012836 Address: 333 Burma Road **Date Inspected:** 24-Mar-2010

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: See Below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

CWI Inspectors: Mr. Liu Hua Jie, Mr Yang Dong and Mr. Lv Li Qing

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG BAY 1

This QA Inspector observed ZPMC welder Mr. Yan Leilei, stencil 214971 is using flux cored welding procedure WPS-B-T-2231-TC-U5-F to make traveler rail weld 20TR1-037-013. This QA Inspector observed ZPMC QC Inspector Mr. Chen Li has recorded a welding current of 309 amps and 31.1 volts. This QA Inspector observed Mr. Yan Leilei appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Li Fayong, stencil 216872 is using flux cored welding procedure WPS-B-T-2231-TC-U5-F to make traveler rail weld 20TR2-034-011. This QA Inspector observed ZPMC QC Inspector Mr. Chen Li has recorded a welding current of 307 amps and 30.0 volts. This QA Inspector observed Mr. Li Fayong appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

WELDING INSPECTION REPORT

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This QA Inspector observed ZPMC welder Mr. Kong Fu Zhi, stencil 219188 is using flux cored welding procedure WPS-B-T-2231-TC-U5-F to make traveler rail weld 20TR1-030-005. This QA Inspector observed ZPMC QC Inspector Mr. Chen Li has recorded a welding current of 309 amps and 31.0 volts. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Zhu Yu Long, stencil 250672 is using flux cored welding procedure WPS-B-T-2231-TC-U5-F to make traveler rail weld 20TR1-028-003. This QA Inspector observed ZPMC QC Inspector Mr. Chen Li has recorded a welding current of 307 amps and 30.4 volts. This QA Inspector observed Mr. Zhu Yu Long appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

OBG Bay 14

This QA Inspector observed ZPMC welder Ms. Zhang Sumei, stencil 207464 is using shielded metal arc welding procedure specification WPS-B-P-2112-FCM-1 to make tack weld SEG3004*-022 between deck plate DP3044-001 and DP3045-001. These deck plates will be installed in OBG segment 12. This QA Inspector observed a welding current of approximately 160 amps, a torch is being used to preheat the base material and Ms. Zhang Sumei appears to be certified to make this weld. Prior to tack welding one ZPMC worker, who is on the underside of the deck plates, is measuring and adjusting the alignment of the deck plates to minimize the weld joint mismatch between the two adjacent plates. This QA Inspector observed the shielded metal arc welding electrodes are being stored in an electrically heated electrode storage container which is warm to the touch. Items observed on this date appeared to generally comply with applicable contract documents.

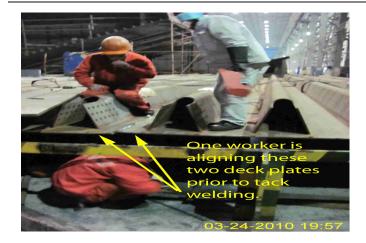
This QA Inspector observed ZPMC welder Mr. Hue Junrong, stencil 201215 is using flux cored welding procedure WPS-B-T-2232-TC-P4-F to make OBG weld SEG3006S-041. This weld is located in OBG segment 12CW. This QA Inspector observed ZPMC CWI Mr. Liu Hua Jie has recorded a welding current of 311 amps and 31.4 volt and this QA Inspector measured a welding current of approximately 300 amps. This QA Inspector observed Mr. Hue Junrong appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. He Hanbi, stencil 202122 is using flux cored welding procedure WPS-B-T-2233-TC-P4-F to make OBG weld SEG3006N-056. This weld is located in OBG segment 12CW. This QA Inspector observed ZPMC CWI Mr. Liu Hua Jie has recorded a welding current of 296 amps and 25.6 volt and this QA Inspector measured a welding current of approximately 300 amps. This QA Inspector observed Mr. He Hanbi appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wang Changmin, stencil 047864 is using shielded metal arc welding procedure specification WPS-B-T-2112 to complete side plate stiffener hold back weld SP3034B-133. This QA Inspector observed a welding current of approximately 150 amps and the welding electrodes are being stored in a heated portable electrode storage oven. This QA Inspector observed the base material was preheated with a torch prior to commencement of the welding and Mr. Wang Changmin appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

See Above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer